IN THE CLAIMS

1. - 16. (cancelled)

17. (currently amended) A method of controlling NOx emissions comprising:

permitting flue gas to enter ~~the~~ an interior of a chamber;

quenching flue gas to lower the temperature of the flue gas;

injecting ozone into an ozone injection zone of the interior of the chamber; ~~and~~

spraying a liquid towards the walls of the chamber to capture reaction products of the oxidation process; and~~.~~

maintaining a portion of the ozone injection zone of the chamber substantially free of droplets of the liquid.

18. (previously presented) The method according to claim 17, wherein the liquid includes a sodium, calcium, or magnesium reagent.

19. (original) A method according to claim 17, wherein the injection of ozone into the interior of the chamber occurs below the spraying the liquid, and the entrance of a flue gas is below spraying the liquid.

20. (original) A method according to claim 17, wherein the spraying of a liquid includes the step of injecting a liquid through 3 or more spray nozzles.

21. - 23. (cancelled)

24. (original) A method according to claim 17, further comprising maintaining a liquid to gas ratio between 5-80 gallons per 1000 feet^3 of gas flow.

25. (original) A method according to claim 17, further comprising allowing flue gas to travel through the apparatus at a rate from 3-26 feet per second.

26. (original) A method according to claim 17, wherein NOx emissions are less than 40 ppmdv.

27. (previously presented) A method according to claim 19, further comprising maintaining a percentage of NOx removal that is greater than or equal to 50%.

28. (previously presented) A method according to claim 17, further comprising quenching the flue gas to a temperature of between 120°-180° F.

29. (original) A method according to claim 17, wherein the quenching of the flue gas occurs at the entrance into the interior of the chamber, and includes spraying liquid through the gas as it enters the chamber.

30. (previously presented) A method of controlling NOx emissions comprising the steps of:

introducing a flue gas into a chamber;

quenching flue gas;

injecting ozone into an ozone injection and retention zone in the interior of the chamber;

spraying a liquid towards the walls of the chamber to capture reaction products of the oxidation process so as to maintain a substantially droplet-free chamber interior in the vicinity of the ozone injection and retention zone.

31. (previously presented) A method according to claim 30, wherein the injecting ozone into the interior of the chamber occurs prior to spraying a liquid.

32. (original) A method according to claim 30, wherein spraying the liquid comprises spraying the liquid through 3 or more spray nozzles.

33. - 35. (cancelled)

36. (original) A method according to claim 30, further comprising maintaining a liquid to gas ratio between 5-80 gallons per 1000 feet^3 of gas flow.

37. (original) A method according to claim 30, further comprising allowing flue gas to travel through the apparatus at a rate of from 3-26 feet/second.

38. (original) A method according to claim 30, wherein NOx emissions are less or equal to 50 ppmdv.

39. (previously presented) A method according to claim 30, further comprising maintaining a percentage of NOx removal greater than or equal to 50%.

40. (original) A method according to claim 30, further comprising quenching the flue gas to a temperature of between 140°-160° F.

41. - 52. (cancelled)

53. (currently amended) A method of controlling NOx emissions comprising:

permitting flue gas to enter an~~the~~ interior of a chamber;

spraying a quenching liquid toward the walls of the chamber to lower the temperature of the flue gas;

injecting ozone into an ozone injection zone of the interior of the chamber; and

maintaining a portion of the ozone injection zone~~interior~~ of the chamber substantially free of droplets of the quenching liquid.

54. (previously presented) The method of claim 53 further comprising the step of spraying a product-capturing liquid towards the walls of the chamber to capture reaction products of the oxidation process.

55. (currently amended) A method of controlling NOx emissions comprising:

permitting flue gas to enter ~~the~~ an interior of a chamber; ~~and~~

spraying a product-capturing liquid towards the walls of the chamber to capture reaction products of the oxidation process;

injecting ozone into an ozone injection zone of the interior of the chamber; and maintaining a portion of the ozone injection zone ~~interior~~ of the chamber substantially free of droplets of the product-capturing liquid.

56. (previously presented) The method of claim 55 further comprising the step of spraying a quenching liquid toward the walls of the chamber to lower the temperature of the flue gas.

57. (cancelled)